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ABSTRACT

The Indiana College-Level Manpower Study is being conducted by the Indiana Commission for Higher Education to provide manpower information of value to planning at the postsecondary level. Factors involving both manpower supply and demand are being investigated, and educational and occupational areas in which major supply/demand imbalances exist will be identified. This report deals with the supply/demand situation for elementary and secondary school teachers in Indiana's public schools. Because Indiana has a number of public and independent colleges and universities heavily involved in the preparation of teachers, the commission felt it important that an assessment be made of future employment opportunities for teachers in the state. Students, as well as institutions, will be better able to develop plans for the future when they are able to take into account discernible trends rather than reactions to current problems. One section of this report deals with teachers employed in Indiana from 1970-71 to 1974-75. This information was included to make clear the changes that have taken place over a mere five-year period, primarily as a result of a decline or leveling in enrollments in the state's elementary and secondary public schools. Another section reports on a survey of all the school corporation superintendents in Indiana, conducted to determine their views toward the current employment situation for teachers in various teaching areas. Projections of the future demand for inexperienced teachers in Indiana's public schools are also discussed, and the methodology upon which the projections are based is explained. The report concludes that although there will be a shortage of available teaching postitions at the secondary level, this does not mean that there will be no jobs available. There are some teaching specialty areas, particularly in the industrial arts, vocational and agricultural areas, and some areas of mathematics and advanced science, where the prospects for job applicants will be good. Combinations of two or more proficiency areas will also aid teaching aspirants in their search for employment. (MM)

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EMPLOYABILITY OF ELEMENTARY AND SECONDARY SCHOOL TEACHERS IN INDIANA

INDIANA COLLEGE-LEVEL MANPOWER STUDY

Report Number Seven

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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INDIANA COLLEGE-LEVEL MANPOWER STUDY

Report Number Seven

EMPLOYABILITY OF ELEMENTARY AND SECONDARY SCHOOL TEACHERS IN INDIANA

June, 1976

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is supported by a grant from the
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INDIANA COLLEGE-LEVEL MANPOWER STUDY LIST OF PUBLICATIONS

Publications to date:

1. *Review of Literature Related to College-Level Manpower Study for the State of Indiana*, January, 1975.

2. *Educational Plans and Career Choices of High School College Preparatory Students in Indiana*, October, 1975.

3. *Educational Plans and Career Choices of Bachelor's Degree Recipients in Indiana*, November, 1975.

4. *Educational Plans and Career Choices of Associate Degree Recipients in Indiana*, December, 1975.

5. *Employability of College Graduates in Indiana Business and Industry*, February, 1976.

6. *The Demand for Legal Assistants in Indiana*, June, 1976.

7. *Employability of Elementary and Secondary School Teachers in Indiana*, June, 1976.

PREFACE

The Indiana College-Level Manpower Study is being conducted by the Indiana Commission for Higher Education to provide manpower information of value to planning at the postsecondary level. Factors involving both manpower supply and demand are being investigated, and educational and occupational areas in which major supply/demand imbalances exist will be identified.

This report deals with the supply of and demand for elementary and secondary school teachers in Indiana's public schools. A great amount of demographic data were provided by the Indiana Department of Public Instruction's division of Educational Information and Research. We would like to thank them for their patient and detailed help in this regard. We would also like to thank all of the school corporation superintendents who took time from their busy schedules to respond to our survey of them.

The Indiana College-Level Manpower Study is being conducted by the Commission with aid of a grant from the Lilly Endowment. The Commission wishes to express its appreciation to the Lilly Endowment for this support. The views expressed in this report are not to be construed as those of the Endowment.

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HIGHLIGHTS

* Student enrollments in elementary schools will continue to decline until 1981-82 when they will stabilize.

* Student enrollments at the secondary level will decline slowly until 1979-80, when they will drop rapidly.

* The demand for new teachers at the elementary level will hold near the level of demand for 1974-75 or 1975-76.

* The demand for new teachers at the secondary level will hold near the 1975-76 level until 1979-80, when a rapid decline in this demand will be experienced.

* Recognition of the teacher surplus has already had the effect of leading to decreases in the number of college students aspiring to teaching careers and pursuing education as a major field of study. Even though these adjustments will continue, it is doubtful whether they will reach the level necessary to avoid great surpluses of secondary school teachers in the early 1980's.

INTRODUCTION

In 1966 there were published early warnings that the nation, within a few years, would face a major surplus of teachers in relationship to the demand for them. Colleges and universities, meanwhile, were continuing to recruit, enroll, and prepare increasing numbers of teachers in reaction to the teacher shortages experienced throughout the 1950's and 1960's. The bright outlook for those hoping to pursue careers in teaching rapidly vanished when it became apparent by the late 1960's that declining school enrollments would, in fact, leave many of those preparing to become teachers without job opportunities.

Recognition of the teacher surplus has had the effect of lessening the surplus by causing many college students to change their career plans from teaching to other areas. There are now people who predict a teacher shortage in the near future because of an overreaction to the labor market. Others contend that the surplus will continue with its current intensity and that, even in the few subject areas in which teacher supply does not appear to equal demand, there will soon be more teachers than jobs.

Indiana has a number of public and independent colleges and universities heavily involved in the preparation of teachers,and it therefore becomes important that an assessment be made of future employment opportunities for teachers in the state. Students, along with institutions, will be better able to develop plans for the future when they take into account discernible trends rather than reacting to current problems.

RECENT TRENDS IN THE EMPLOYMENT OF TEACHERS IN INDIANA

This section of the report deals with teachers employed in Indiana from 1970-71 to 1974-75. The data were obtained from the Indiana Department of Public Instruction. The purpose of including this section is to make clear the changes which have taken place over a mere five year period of time, primarily as a result of a decline or leveling in enrollments in the state's elementary and secondary public schools.

Table 1 represents the employment of elementary and secondary public school teachers in Indiana from 1970-71 to 1974-75 by subject area.

TABLE 1: TEACHERS IN INDIANA 1970-1975, BY SUBJECT AREA*

Subject Area	Full-Time Teachers Employed in Indiana										Gain or Loss 1970-71 to 1974-75	
	1970-71		1971-72		1972-73		1973-74		1974-75			
	n	%	n	%	n	%	n	%	n	%	n	%
Elementary (Subtotal)	34,695	67.6	34,773	67.5	34,544	67.4	34,553	66.9	34,299	66.6	-396	-1.1
Kindergarten	1,605	3.1	1,570	3.0	1,532	3.0	1,521	2.9	1,528	3.0	-77	-5.9
Elementary clsrm.	31,600	61.6	31,562	61.3	31,225	60.9	30,995	60.0	30,563	59.4	-1,037	-9.2
Special education	1,437	2.8	1,574	3.1	1,701	3.3	1,949	3.8	2,092	4.1	655	45.6
Unknown specialty	54	0.1	67	0.1	87	0.2	88	0.2	116	0.2	62	114.8
Secondary (Subtotal)	16,628	32.4	16,751	32.5	16,733	32.6	17,063	33.1	17,181	33.4	553	3.3
Special education	168	0.3	207	0.4	218	0.4	292	0.6	350	0.7	182	108.3
English	3,056	6.0	3,030	5.9	3,019	5.9	3,022	5.9	2,976	5.8	-80	-2.6
Social studies	2,004	3.9	1,980	3.8	1,971	3.8	1,989	3.9	1,974	3.8	-30	-1.5
Languages	1,049	2.0	1,034	2.0	983	1.9	973	1.9	940	1.8	-109	-10.4
Music	659	1.3	668	1.3	648	1.3	651	1.3	626	1.2	-30	-4.6
Art	501	1.0	517	1.0	537	1.0	543	1.1	569	1.1	68	13.6
Mathematics	1,677	3.3	1,660	3.2	1,648	3.2	1,665	3.2	1,655	3.2	-22	-1.3
Phys.education	1,515	3.0	1,555	3.0	1,562	3.0	1,569	3.1	1,590	3.1	75	5.0
Science	1,580	3.1	1,575	3.1	1,587	3.1	1,607	3.1	1,577	3.1	-3	-0.2
Business	1,562	3.0	1,532	3.0	1,504	2.9	1,528	3.0	1,504	3.0	-58	-3.7
Agr./home econ.	417	0.8	409	0.8	401	0.8	382	0.8	377	0.7	-40	-9.6
Industrial arts	1,147	2.2	1,178	2.3	1,201	2.3	1,220	2.4	1,249	2.4	102	8.9
Vocational	971	1.9	1,055	2.0	1,126	2.2	1,178	2.3	1,311	2.5	349	35.0
Unknown specialty	325	0.6	351	0.7	393	0.8	409	0.8	484	0.1	159	48.9
TOTAL	51,323	100.0	51,524	100.0	51,277	100.0	51,616	100.0	51,480	100.0	157	0.3

*The data of these tables are based upon full-time equivalent (FTE) teachers. Therefore an individual reported as spending half his time teaching and half in administration would account for 0.5 teachers. All figures have been rounded to the nearest whole number so column totals will often differ from the sums of the numbers in the columns.

The data of Table 1 indicate that the overall number of teachers employed in the public schools of the state has actually increased slightly since 1970-71, with a 1.1 percent decrease at the elementary level more than offset by a 3.3 percent increase at the secondary level. However, when viewed by subject area the changes in the first half of the decade become more pronounced.

Special education has witnessed major increases in the number of teachers employed at both the elementary (45.6 percent) and secondary (108.3 percent) levels since 1970-71. The only secondary teaching areas experiencing growth have been vocational (35 percent), art (13.6 percent), industrial arts (8.9 percent), and physical education (5 percent).

Major declines in numbers of teachers are to be found in many areas. Perhaps most noteworthy was the 9.2 percent decrease in elementary level classroom teachers, representing more than one thousand positions. Ten of the sixteen specialty areas experienced decreases in the numbers employed over the five year period.

* * * * *

Table 2 presents demographic trends concerning the ages of Indiana's public school teachers over the first half of the decade.

TABLE 2: AGES OF INDIANA TEACHERS, 1970-71 TO 1974-75

	Elementary			Secondary		
Age	1970-71	1972-73	1974-75	1970-71	1972-73	1974-75
24 yrs.or less	14.7%	11.5%	8.9%	11.8%	8.1%	7.4%
25-29 yrs.	23.5	27.3	28.8	26.1	27.5	26.2
30-39 yrs.	19.4	21.7	24.3	25.6	29.2	31.7
40-49 yrs.	15.8	16.6	17.1	18.1	17.7	17.6
50-59 yrs.	15.5	14.5	13.6	12.2	12.2	12.7
60+ yrs.	11.1	8.5	7.3	6.2	5.3	4.4
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

The data of Table 2 represent the ages of Indiana's public school teachers from 1970-71 to 1974-75. The percentages of teachers in both the youngest and oldest age groupings have decreased in the first half of the 1970's. There has been a clustering of large percentages of teachers in the middle-range age brackets of from thirty to fifty years of age, with this effect particularly noticeable among the elementary school teachers. These teachers of from thirty to fifty years of age are those who have experienced a number of years of teaching and have less tendency than younger or much older teachers to change occupations or to retire. For this reason, the changing age levels of teachers has become a demographic factor tending to limit future job openings for some time to come.

* * * * *

Table 3 represents the Indiana teachers' years of teaching experience from 1970-71 to 1974-75.

TABLE 3: YEARS OF TEACHING EXPERIENCE OF INDIANA TEACHERS, 1970-71 TO 1974-75

Years of Experience	Elementary			Secondary		
	1970-71	1972-73	1974-75	1970-71	1972-73	1974-75
None	11.4%	8.6%	6.8%	9.3%	7.0%	6.6%
One	10.6	9.5	8.3	9.1	7.1	6.8
Two	8.3	9.6	8.0	7.8	7.9	6.5
Three	6.6	8.1	8.0	6.4	7.5	5.9
Four	5.6	6.4	7.6	6.0	6.6	6.4
Five to ten	20.7	22.7	26.3	24.6	26.6	28.7
Over ten	36.8	35.0	35.0	36.7	37.4	39.1
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

Table 3 presents the years of teaching experience of the public school teachers in Indiana. The findings of this table compare closely with those of Table 2 pertaining to the teachers' ages. There is a noticeable increase in the years of experience of teachers during the first half of the decade, particularly at the secondary level.

* * * * *

TABLE 4: EDUCATIONAL ATTAINMENT OF INDIANA TEACHERS, 1970-71 TO 1974-75

Educational Level Completed	Elementary			Secondary		
	1970-71	1972-73	1974-75	1970-71	1972-73	1974-75
High school or less	0.1%	0.1%	0.0%	0.4%	0.5%	0.9%
Associate degree	2.8	1.7	1.0	0.5	0.5	0.6
Bachelor's degree	59.5	52.0	42.9	46.3	40.1	34.2
Master's degree	37.2	45.8	55.5	52.1	58.0	63.2
Other 2nd level degree	0.2	0.4	0.5	0.7	0.8	0.9
Doctorate	0.1	0.1	0.1	0.1	0.2	0.2
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

Table 4 presents the educational attainment of Indiana's public school teachers from 1970-71 to 1974-75. The data indicate that in the first half of the 1970's the level of educational attainment of these teachers increased dramatically, both among elementary and secondary school teachers. In 1970-71, 37 percent of the elementary level teachers and 52 percent of the secondary level teachers had received master's degrees. By 1974-75 these figures had risen to 56 percent and 63 percent respectively.

This increase in the level of education of teachers may pose a problem for universities' graduate schools of education as the number of their potential enrollees has been greatly reduced, and decreased hiring of new entrants to the profession limits further the numbers who might enroll in graduate level programs.

* * * * *

Table 5 represents the previous year's employment for Indiana teachers, from 1970-71 to 1974-75. These data are particularly useful in providing an idea of the mobility of teachers within the profession and of the various sources from which new teachers are hired.

TABLE 5: PREVIOUS YEAR'S EMPLOYMENT OF INDIANA TEACHERS, 1970-71 TO 1974-75

Previous Year's Employment	Elementary 1970-71 n	%	1972-73 n	%	1974-75 n	%	Secondary 1970-71 n	%	1972-73 n	%	1974-75 n	%	Total 1970-71 n	%	1972-73 n	%	1974-75 n	%
Teacher (Same corp.)	27,394	79.1	29,650	86.1	30,288	88.6	13,209	81.0	14,266	86.6	15,549	87.1	40,603	79.7	43,915	86.3	44,837	88.1
College student (Ind.)	3,267	9.4	2,621	7.6	1,887	5.5	1,268	7.8	1,006	6.1	904	5.4	4,535	8.9	3,627	7.1	2,791	5.5
Teacher (Other corp.)	1,548	4.5	748	2.2	740	2.2	885	5.4	490	3.0	568	3.4	2,433	4.8	1,237	2.4	1,308	2.6
Teacher(Outside Ind.)	840	2.4	334	1.0	201	0.6	303	1.9	145	0.9	135	0.8	1,143	2.2	479	0.9	336	0.7
Homemaker	697	2.0	477	1.4	465	1.4	184	1.1	140	0.9	141	0.8	881	1.7	617	1.2	606	1.2
Coll. student (non-Ind)	530	1.5	249	0.7	147	0.4	190	1.2	125	0.8	102	0.6	720	1.4	374	0.7	249	0.5
Business employ	79	0.2	55	0.2	94	0.3	96	0.6	70	0.4	115	0.7	175	0.3	125	0.2	209	0.4
Teacher (Pvt.school)	103	0.3	62	0.2	53	0.2	45	0.3	26	0.2	27	0.2	148	0.3	88	0.2	80	0.2
College teacher	29	0.1	22	0.1	24	0.1	52	0.3	32	0.2	33	0.2	81	0.2	54	0.1	57	0.1
Military	44	0.1	39	0.1	26	0.1	34	0.2	35	0.2	35	0.2	78	0.2	74	0.1	61	0.1
Other	108	0.3	197	0.6	251	0.7	36	0.2	103	0.6	88	0.5	144	0.3	300	0.6	339	0.7
TOTAL	34,639	100.0	34,454	100.0	34,176	100.0	16,302	100.0	16,438	100.0	17,697	100.0	50,941	100.0	50,890	100.0	50,873	100.0

The data of Table 5 clearly indicate a decrease in the tendency of Indiana teachers to move from one school corporation to another within the state. In 1970-71, eighty percent had been employed in the same school corporation the previous year, but by 1974-75 this figure had risen to 88 percent.

The increase in the percentage of teachers remaining in the same corporation has had the effect of causing declining percentages over the first half of the decade for virtually all other categories of previous year activities. Whereas in 1970-71, twenty percent of the public school teachers had been employed at either a different job or a different location the year before, by 1974-75 only twelve percent had done so.

The data of Table 5 provide information concerning the sources from which teachers are employed. In order to focus upon this topic, the data of Table 5 have been adjusted to exclude those teachers who had been employed in either the same school corporation or a different Indiana corporation the previous year. These adjustments are reported in Table 6.

TABLE 6: PREVIOUS YEAR'S EMPLOYMENT OF INDIANA TEACHERS WHO HAD BEEN OTHERWISE EMPLOYED, 1970-71 TO 1974-75

Previous Year's Employment	Elementary 1970-71 n	%	1972-73 n	%	1974-75 n	%	Secondary 1970-71 n	%	1972-73 n	%	1974-75 n	%	Total 1970-71 n	%	1972-73 n	%	1974-75 n	%
College student (Ind.)	3,267	57.3	2,621	64.6	1,887	59.9	1,268	57.4	1,006	59.8	904	57.2	4,535	57.3	3,627	63.2	2,791	59.0
Teacher (Outside Ind.)	840	14.7	334	8.2	201	6.4	303	13.7	145	8.6	135	8.5	1,143	14.5	479	8.3	336	7.1
Homemaker	697	12.1	477	11.8	465	14.8	184	8.3	140	8.3	141	8.9	881	11.1	617	10.8	606	12.8
Coll.student (non-Ind)	530	9.3	249	6.1	147	4.7	190	8.6	125	7.4	102	6.5	720	9.1	374	6.5	249	5.3
Business employ	79	1.4	55	1.4	94	3.0	96	4.3	70	4.2	115	7.3	175	2.2	125	2.2	209	4.4
Teacher(Pvt.school)	103	1.8	62	1.5	53	1.7	45	2.0	26	1.5	27	1.7	148	1.9	88	1.5	80	1.7
College teacher	29	0.5	22	0.5	24	0.8	52	2.4	32	1.9	33	2.1	81	1.0	54	0.9	57	1.2
Military	44	0.8	39	1.0	26	0.8	34	1.5	35	2.1	35	2.2	78	1.0	74	1.3	61	1.3
Other	108	1.9	197	4.9	251	8.0	36	1.6	103	6.1	88	5.6	144	1.8	300	5.2	339	7.2
TOTAL	5,697	100.0	4,056	100.0	3,148	100.0	2,208	100.0	1,682	100.0	1,580	100.0	7,905	100.0	5,738	100.0	4,728	100.0

Table 6 represents the previous year's employment of Indiana teachers who had not been public school teachers in an Indiana school corporation. The data of the table clarify some trends which appear to take place as the hiring of teachers is reduced as it was in the early 1970's.

The percentage of those teachers who were hired from out-of-state suffered sharp declines. As overall hiring of new teachers decreased, reductions in the hiring of those who had been non-Indiana teachers or non-Indiana college students was even greater than the overall hiring declines. The proportion of those new teachers who had been Indiana college students the previous year rose from 57 percent in 1970-71 to 63 percent in 1972-73, then declined in 1974-75 to 59 percent.

The teachers employed who were not newly graduated college students made a considerable labor pool. In 1974-75, 1,688 teachers were employed from this category, representing 36 percent of all teachers newly employed. Homemakers constituted the largest group of this category and numbered 606, a size approxmately equal to half of the 1,263 baccalaureate degrees in education granted by all of the independent colleges and universities in Indiana.

* * * * *

CURRENT SUPPLY/DEMAND SITUATION IN INDIANA (SURVEY OF INDIANA SCHOOL SUPERINTENDENTS)

A survey of all the school corporation superintendents in Indiana was conducted in order to determine their views toward the current employment situation for teachers in various teaching areas. All of the state's superintendents were contacted either by telephone or by a mailed questionnaire, and asked to respond to a set of questions concerning this topic. The combined response rate for the two methods of data collection was a high 90.1 percent of the 300-plus school superintendents of Indiana, and the following section of this report represents their expressed views.

The primary reason for conducting this survey was to assess the superintendents' views toward the current teacher/supply demand relationships for various teaching areas. Table 7 represents their opinions concerning this relationship, based upon their hiring experience within their own school corporation.

TABLE 7: TEACHER SUPPLY/DEMAND RELATIONSHIPS, BASED UPON EXPERIENCE OF INDIANA SCHOOL SUPERINTENDENTS

Teaching Area	Great Oversupply	Moderate Oversupply	Relative Balance	Moderate Undersupply	Great Undersupply	General Conclusion
Kindergarten	20.0%	53.7%	25.5%	0.8%	0.0%	Mod.oversupply
Elementary clsrm.	65.9	31.8	2.3	0.0	0.0	Great oversupply
Special education	4.9	31.2	49.0	13.4	1.6	Mod.oversupply
Secondary level						
English	18.8	52.1	25.7	3.4	0.0	Mod.oversupply
Social studies	76.9	22.3	4.5	0.0	0.0	Great oversupply
Language	5.8	29.1	50.4	14.3	0.4	Mod.oversupply
Music	4.2	32.8	52.7	9.9	0.4	Mod.oversupply
Art	3.1	21.5	62.3	12.3	0.8	Mod.oversupply
Mathematics	1.9	25.7	42.5	28.0	1.9	Rel.balance
Physical educ.	79.8	18.1	1.6	0.0	0.4	Great oversupply
Science	4.7	28.0	48.8	16.9	1.6	Mod.oversupply
Business	8.7	41.4	44.1	5.7	0.0	Mod.oversupply
Agriculture	0.0	0.0	15.4	51.9	32.7	Mod.undersupply
Home economics	11.0	52.0	34.2	2.7	0.0	Mod.oversupply
Industrial arts	0.0	6.5	35.4	43.0	15.2	Mod.undersupply
Vocational	0.9	3.1	29.4	52.2	14.5	Mod.undersupply

The data of Table 7 clearly indicate that, for almost all subject areas, the superintendents had found an oversupply of teachers compared to the current demand for them. For secondary level physical education and social studies, and elementary classroom, large majorities indicated that there was a great oversupply of teachers. For many teaching areas pluralities thought the situation to be in balance with sizable minorities noting a teacher oversupply, and the only areas in which an undersupply of teachers appeared to exist were in vocational education, industrial arts, and agriculture.

The respondents were asked whether or not they anticipated that the supply/demand relationships for any of these teaching areas would be changing in the future. Most indicated that such changes were not expected within a foreseeable time period. Among those who anticipated changes, many were concerned that the demand would further decline due to anticipated enrollment decreases at the secondary level. Though a few respondents felt that changing college student career plans would lead to a shortage of teachers by the end of the decade, those expressing this view were in a great minority.

Factors involving school staffing patterns and student/teacher ratios are of great importance in discussing the potential demand for teachers. If schools are overstaffed, it can be anticipated that a number of positions falling vacant will not be filled, thereby raising the student/teacher ratio. In a situation of understaffing, it can be anticipated that an attempt will be made to increase the number of teachers, thus lowering the student/teacher ratio.

In order to provide information concerning staffing patterns in Indiana schools, the superintendents were asked about overstaffing or understaffing in their corporations, either in specific teaching areas or in general. Approximately sixty percent thought that there was a good balance between teachers and

students in their corporations. Of those who had problems in this regard, a majority noted an overstaffing of teachers, generally at the elementary level. Those who were understaffed most frequently noted that this problem existed for teachers in the industrial arts, vocational programs, girls' physical education, or as a result of low budgets.

We did not detect indications that there will be a conscious effort to lower student/teacher ratios in Indiana. These ratios dropped in the early 1970's at the elementary level as a result of declining enrollments and in the opinion of many people led to overstaffing. It is highly possible that similar overstaffing related to falling student/teacher ratios will be experienced in some subject areas at the secondary level as high school enrollments begin their sharp decline in the near future.

The superintendents were also asked whether they had experienced difficulty in their corporations in locating and hiring teachers within any subject areas. The only areas for which ten or more respondents had experienced such difficulty were the industrial arts (56), agriculture (27), advanced sciences (25), special education (16), mathematics (14), and vocational education (11). It appears then that, with few exceptions, Indiana's school corporations have not experienced difficulty in locating and hiring teachers.

About three-quarters of the respondents who had experienced difficulty in locating and hiring teachers attributed the cause of their problem to an undersupply of teachers in the specific area. The remaining quarter offered a variety of reasons including late resignations of teachers, low salaries and business-industry competition, undesirable school locations, and the inability to find teachers with needed subject area combinations. Hiring problems, then, were frequently the result of factors other than an apparent undersupply of personnel in a particular teaching area.

Numerous superintendents, particularly those from small school corporations, noted that there was often difficulty in finding teachers qualified to teach in a combination of subject areas. Among specific combinations mentioned were chemistry-physics, math-science, English-journalism, and agriculture-science. It is possible that a propitious choice of a combination of subject area proficiencies will increase the possibilities of a new graduate seeking employment as a teacher.

FUTURE DEMAND FOR PUBLIC SCHOOL TEACHERS IN INDIANA

This section of the report deals with projections of the future demand for inexperienced teachers in Indiana's public schools. There are two basic ways in which teaching positions become open: through increases in the number of positions or through the separation of current teachers from positions as a result of death, retirement, or change of occupation or location.

Increases or decreases in the overall number of teachers employed in a school area, or state, are generally closely correlated to rising or falling students enrollments. However, it is sometimes the case that a changing student/teacher ratio will offset the effect of changing enrollments. The following projections of teacher demand are based upon projected student enrollments as a means of estimating future numbers of teachers employed, but possible changes in the student/teacher ratio are also considered. The student enrollment projections were developed by the Department of Public Instruction and are contained in Appendix B.

The projections also take the separation of current teachers from their positions into account. Data provided by the Department of Public Instruction were used in order to determine estimates of the average number of teachers who, each year, leave the occupation of public school teaching in Indiana.

The number of years of teaching experience was found to be an important factor in indicating the probability that a teacher would continue in the profession in Indiana from one year to the next. Average progression ratios for different levels of teaching experience were calculated based upon actual data from 1970-71 to 1975-76. These progression ratios were found to differ noticeably depending upon the number of years of experience the teachers had

accumulated. Table 8 represents the average progression ratios used in the calculation of our projections of demand for inexperienced teachers.

TABLE 8: AVERAGE PROGRESSION RATIOS USED IN CALCULATION OF PROJECTIONS

Years Experience	Elementary[1] Classroom	Secondary
From 0 to 1 year	.98	.97
From 1 to 2 years	.92	.95
From 2 to 3 years	.89	.93
From 3 to 4 years	.89	.93
From 4 to 5 years	.89	.93
From 5 to 6 years	.92	.96
From 6 to 7 years	.92	.95
From 7 to 8 years	.93	.96
From 8 to 9 years	.95	.96
From 9 to 10 years	.94	.98
From 10 to 10+ years	.94[2]	.98[2]
More than 10 years	.92[3]	.94[3]

1. Includes all elementary teachers except kindergarten and special education.
2. Assumed, based upon previous progression rates.
3. The number progressing from a year's teachers with ten years experience was subtracted from the next year's number with more than 10 years experience. The resulting figure was then divided by the preceding year's number with more than ten years experience to obtain the progression ratio of those with more than ten years experience.

Note: Because these progression ratios take into account the state's total number of teachers, they include those who may leave the teaching profession temporarily and reenter it at a later date.

It would appear that, after a very high progression ratio or retention rate among teachers going from first to second year of teaching, this rate drops sharply for about four years. The ratio then, about the fifth year of teaching, begins to rise again indicating that those who teach for five years have a greater probability of continuing to the next year than those in their second to fifth years of teaching. This fact must be taken into account in any attempt to project future openings for teachers.

Tables 9 and 10 represent the actual hiring of inexperienced elementary and secondary school teachers in Indiana public schools from 1970-71 to 1975-76.

Based upon these hiring patterns and enrollment projections of the Department of Public Instruction, projections of the hiring of inexperienced teachers (those with zero previous years of teaching experience) from 1976-77 to 1981-82 were developed. For a detailed explanation of the methodology used in developing these projections and more detailed tables of the projected teacher work force by years of teaching experience, see Appendix A.

TABLE 9: ACTUAL AND PROJECTED HIRING OF INEXPERIENCED TEACHERS IN INDIANA, 1970-71 TO 1981-82 (CONSTANT STUDENT/TEACHER RATIO*)

	(Actual)						(Projected)					
	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Elementary												
Student enrollments	774,554	776,753	747,935	735,029	709,612	689,576	676,576	665,026	648,360	633,565	618,692	620,000
Student/tchr. ratio	24.5	24.3	24.0	23.7	23.2	22.7	22.7	22.7	22.7	22.7	22.7	22.7
Total no.of teachers	31,600	31,581	31,226	30,996	30,565	30,393	29,805	29,296	28,562	27,910	27,255	27,313
Total no.inexperienced teachers needed	3,579	2,967	2,599	2,359	1,925	1,607	1,850	1,831	1,532	1,551	1,492	2,158
Secondary												
Student enrollments	348,560	357,364	360,082	363,686	36[illegible]	362,758	362,371	360,144	358,664	350,555	340,300	325,000
Student/tchr. ratio	21.6	22.1	22.2	22.2	22.2	21.3	21.3	21.3	21.3	21.3	21.3	21.3
Total no. of teachers	16,135	16,193	16,222	16,362	16,347	16,993	17,013	16,908	16,839	16,458	15,977	15,258
Total no.inexperienced teachers needed	1,494	1,165	1,107	1,145	1,038	927	915	788	817	495	380	126

*Student/teacher ratio maintained at level of 1975-76.

Table 9 presents projections of the hiring of inexperienced teachers based upon the maintenance of the student/teacher ratio of 22.7 at the elementary level and 21.3 at the secondary level which was the case in the 1976-76 school year. As can be seen, maintaining the same student/teacher ratio results in declines in the overall number of teachers employed statewide during years of declining student enrollments.

At the elementary level, continued declining student enrollments are projected to keep the hiring of inexperienced teachers at a low level, though hiring in 1976-78 should be above that of the 1975-76 school year. The beginning of a noteworthy recovery in the hiring of elementary school teachers can be seen in 1981-82 when over 2,100 inexperienced teachers are projected primarily as a result of the end of declining enrollments.

The situation at the secondary level is projected to be much more pessimistic than at the elementary level. The rapid enrollment declines experienced at the elementary schools in the early 1970's will be moving up to the secondary level, resulting in a need for far fewer teachers if the student/teacher ratio remains constant. This situation will drastically reduce the need for inexperienced teachers to the point where, by 1980-81, only about four hundred such teachers will be needed and by 1981-82 this figure may drop to well below two hundred.

It should be noted that declines in enrollments do not necessarily lead to proportional decreases in the number of new teachers to be hired. For example, the projected secondary level enrollments for 1978-79 of 358,664 students declines by 2.3 percent to 350,555. However, the projected demand for new inexperienced teachers during the same time period declines by 39.4 percent, from 817 to 495. Clearly, the magnitude of demand for new teachers is based upon factors other than enrollments alone.

Historical data from 1970 to 1975 indicate that, as student enrollment declines, there is often a simultaneous lowering of the student/teacher ratio. It can be argued that, as enrollments continue to decline during the remainder of the 1970's at both the elementary and secondary level, there will be concurrent declines in student/teacher ratios. For this reason a set of projections in which the student/teacher ratio declines at a rate of 0.3 students/teacher during each year of enrollment declines was developed. This assumed changing ratio appears to be justified by the declining ratios experienced at the elementary level in the first half of the 1970's. These projections, based upon declining student/teacher ratios, are presented in Table 10.

TABLE 10: ACTUAL AND PROJECTED HIRING OF INEXPERIENCED TEACHERS IN INDIANA, 1970-71 TO 1981-82 (DECLINING STUDENT/TEACHER RATIO*)

	(Actual)						(Projected)					
	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Elementary												
Student enrollments	774,554	776,753	747,935	735,029	709,612	689,576	676,576	665,026	648,360	633,565	618,692	620,000
Student/tchr. ratio	24.5	24.3	24.0	23.7	23.2	22.7	22.4	22.1	21.8	21.5	21.2	21.2
Total no. of teachers	31,600	31,581	31,226	30,996	30,565	30,393	30,204	30,092	29,741	29,468	29,184	29,245
Total no. inexperienced teachers	3,579	2,967	2,599	2,359	1,925	1,607	2,249	2,236	1,954	2,009	1,681	1,611
Secondary												
Student enrollments	348,560	357,364	360,082	363,696	363,332	362,758	362,371	360,144	358,664	350,555	340,300	325,000
Student/tchr. ratio	21.6	22.1	22.2	22.2	22.2	21.3	21.0	20.7	20.4	20.1	19.8	19.5
Total no. of teachers	16,135	16,193	16,222	16,362	16,347	16,993	17,256	17,398	17,582	17,441	17,187	16,667
Total no. inexperienced teachers	1,494	1,165	1,107	1,145	1,038	927	1,158	1,043	1,089	771	660	392

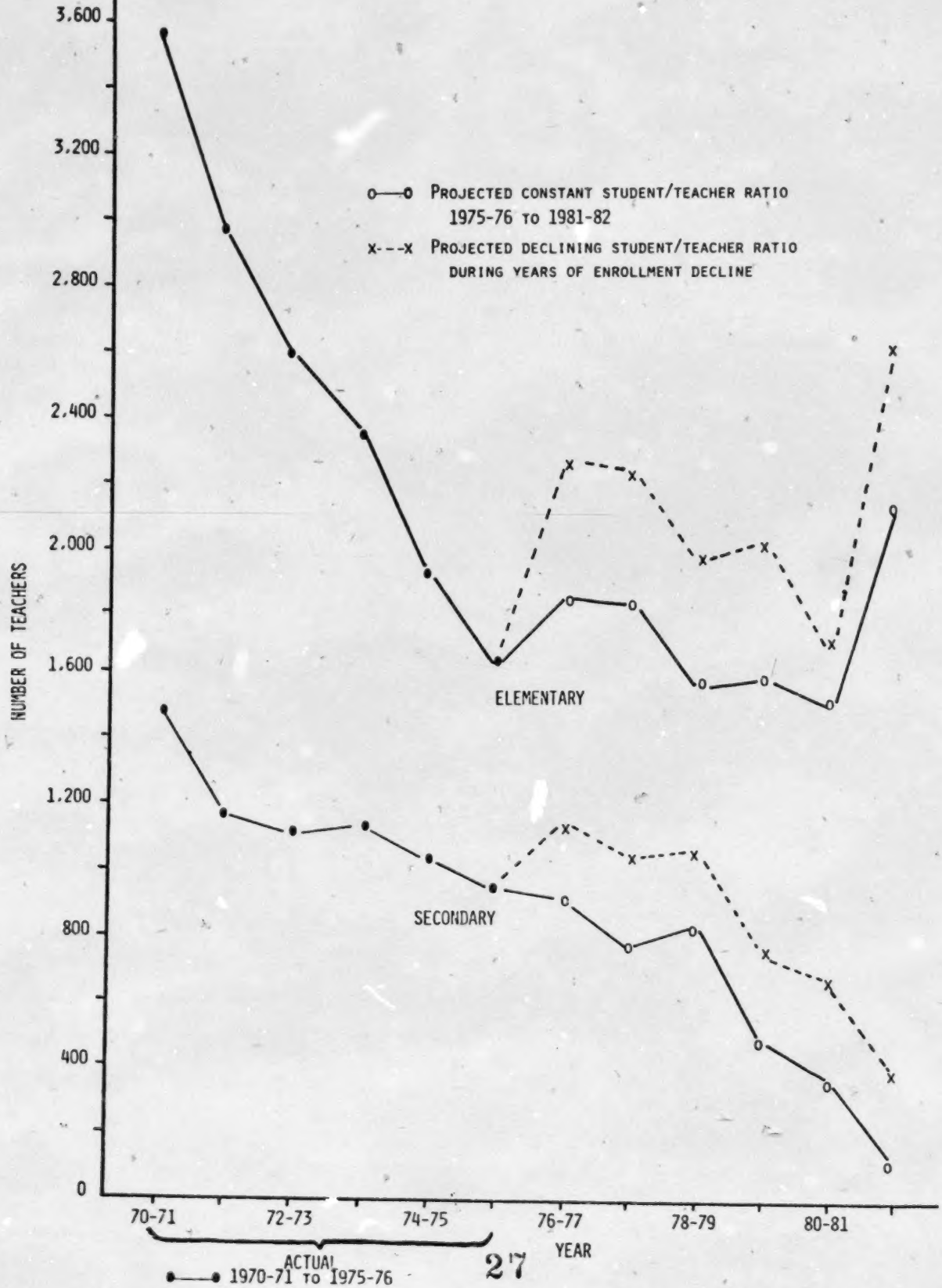
*Student/teacher ratios projected to decline at rate of 0.3 students/teacher per year, during years of enrollment declines.

Because the projections of Table 10 assume declining student/teacher ratios at both the elementary and secondary levels through the rest of the 1970's, it follows that they lead to higher projections of need for inexperienced teachers than did the projections of Table 9. At the elementary level, in fact, further decline in student/teacher ratios might raise the need for new teachers beyond two thousand per year. Though this demand will not even approach the heavier need for elementary school teachers witnessed in the late 1960's and early 1970's, it represents a halt in the rapid decline in the demand for such teachers, and even an increase over the past two years.

At the secondary level declining student/teacher ratios should serve to hold the demand for new teachers at about one thousand per year until the end of the decade. By the 1979-80 year, however, even the student/teacher ratio declines will not keep the demand for new teachers from falling well below a thousand per year. By 1981-82 it is possible that no more than four hundred new secondary school teachers will be needed, even though the student/teacher ratio for that projected year will have fallen to 19.5.

Figure 1 presents graphically the actual and projected trends in the hiring of inexperienced teachers in Indiana's public schools. The graphic presentation clarifies the impact of the changing of student/teacher ratios and also portrays the impact of sharp enrollment declines moving into the secondary schools in the 1979-80 school year.

FIGURE 1: PROJECTED HIRING OF NEW TEACHERS



Note: The sharp rise in the demand for new elementary level teachers in 1981-82 is a short-term phenomenon resulting primarily from the fact the elementary enrollment stabilized in this year after a decade of declines.

THE DECLINING SUPPLY OF TEACHERS

The supply of college gradutes who hope to become elementary or secondary school teachers in Indiana is difficult to project. We can state confidently that the early 1970's produced surpluses of such teachers in nearly all subject areas. The wide publicity received by this surplus has resulted in many young people changing their career plans from teaching to other areas. This is exemplified by a move away from education as a major, both in numbers of students enrolled in college and university degree programs in education and in the career plans of high school seniors.

The bachelor's degrees granted in education in the public and independent colleges and universities in Indiana rose rapidly until 1972-73 when they began to level off and, by 1973-74, a sharp decline in the area had begun. Table 11 depicts this change in degrees granted in education. It should be noted, however, that degrees conferred in education by no means represent an accurate estimate of all those hoping to become teachers since many students seek teacher certification while majoring in other fields of study.

TABLE 11: BACHELOR'S DEGREES CONFERRED IN EDUCATION IN INDIANA, 1969-70 TO 1974-75

Degrees Conferred	Annual Degree Recipients in Indiana					
	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75
Bachelor's degrees in education	5,455	5,820	6,274	6,364	5,786	5,318
Bachelor's degrees (all fields)	22,188	23,642	24,868	26,141	25,593	24,478
Education as percent of all degrees	24.59	24.62	25.23	24.35	22.61	21.73

Source: Indiana institutions' annual HEGIS reports

Table 11 indicates an overall decline in bachelor's degrees in education that set in in 1973-74, and also the fact that, as a percent of all bachelor's degrees granted, this decline was pronounced and began in the 1972-73 academic year. Because these figures relate to degrees granted it is probable that the warnings of a teacher surplus began to affect students' decisions a few years earlier as they chose major fields of study other than education.

The data of two recent surveys of high school seniors afford further evidence of the shift away from education as a career choice.[1] Table 12 presents the percentages of Indiana high school seniors who chose elementary or secondary school teaching as a career aspiration in these surveys of 1972 and 1975.

TABLE 12: CAREER CHOICES OF INDIANA HIGH SCHOOL SENIORS

Career Choice	1972 (N=81,523)	1975 (N=82,654)
Pre-school or kindergarten	0.4%	0.5%
Elementary classroom	2.4	1.4
Special educ. teachers	1.8	1.1
Secondary level teachers	6.0	4.8

Source: Changing Trends in the Plans of High School Seniors

There is a clear move away from school teaching as a career choice from 1972 to 1975 at both the elementary and secondary levels. It would appear that, between 1972 and 1975, it became apparent to the general public that teaching positions would become increasingly hard to obtain, leading to declines in the numbers of college students aspiring to careers as teachers.

Further documentation of the decline in the proportion of students aspiring to careers as teachers is provided by the report of an annual survey

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1. J. P. Lisack, Changing Trends in the Plans of High School Seniors, Purdue University, West Lafayette, Indiana, March, 1976, pg. 24.

of a nationwide sample of college freshmen.[1] Table 13 reports the findings of this survey which deals with the percentages of college freshmen choosing elementary or secondary school teaching as a career.

TABLE 13: PERCENTAGES OF COLLEGE FRESHMEN PLANNING TO PURSUE CAREERS IN EDUCATION, 1970-75

Freshman Career Choices	Percentages of Freshmen Surveyed 1970	1971	1972	1973	1974	1975
Probable career: elementary education	8.0%	6.8%	5.6%	4.2%	3.5%	3.0%
Probable career: secondary education	11.3	8.6	6.5	4.6	4.2	3.5

Source: The American Freshman: National Norms (1970-75 Reports)

The data of Table 13 make clear the fact that college freshmen nationwide have moved away from education as a career choice in recent years. The data do not necessarily mean that there are fewer young people who might be interested in becoming teachers, but probably is a result of the fact that many have recognized the highly competitive job market for the profession and have, as a result, decided to pursue their careers in other areas. College students seem to be responsive to labor market supply/demand situations when reliable information can be presented to them.

Certification of new teachers is another measure which, when viewed over a period of time, gives an approximation of teacher supply. It should be kept in mind that all those qualified to teach do not seek certification and that all those who receive certification do not actively seek teaching

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1. Alexander W. Astin, et al, The American Freshman: National Norms, American Council on Education and University of California at Los Angeles, Reports for Fall 1970 through 1975.

positions but many view it as a back-up occupation. Table 14 presents the number of original teaching certificates granted in Indiana from 1973 to 1975.

TABLE 14: ORIGINAL TEACHER CERTIFICATIONS IN INDIANA BY FIRST AREA OF ENDORSEMENT, 1973-1975

Teaching Area	Number of New Certifications 1973	1974	1975
Elementary	3,869	3,314	2,846
Secondary (Subtotal)	5,382	4,788	4,505
Special education	495	544	536
English	932	762	708
Social studies	828	659	529
Languages	301	268	221
Music	332	320	364
Art	287	277	267
Mathematics	382	351	316
Physical education	710	656	647
Science	369	277	295
Business	205	180	169
Agriculture/home econ.	307	274	250
Industrial arts	193	189	165
Vocational	41	30	38
TOTAL	9,251	8,102	7,351

Source: Indiana Department of Public Instruction

The data of Table 14, when compared with the hiring of teachers during the related years, document the surplus of teachers in Indiana. However, as was noted above, not all those receiving certification should be considered a part of the teacher supply because many do not actively seek such positions.

It should also be noted that the data are reported by the area of primary endorsement. Many of those receiving certification also have a secondary endorsement, and a limited number are qualified to teach in even more than two areas.

It is difficult to project the number of teachers who will be seeking employment in future years. Long-range projections of degrees granted in

an academic area are often inaccurate because, as manpower supply/demand imbalances become known, student behavior changes and the projections become rapidly outdated.

Projections of degrees granted in education are of limited utility in estimating future teacher supply. In a Commission for Higher Education survey of 1975 bachelor's degree recipients it was found that only 61 percent of those who hoped to become secondary school teachers had majored in education. Significant minorities had pursued majors in the liberal arts, social sciences, and mathematics.

This variable background for secondary school teachers makes it particularly difficult to project the supply of secondary school teachers for future years. We can be confident that the number is declining, but the magnitude of that decline can probably best be assessed by viewing the plans of college students more carefully. Therefore, surveys of the career plans of college freshmen such as that noted in Table 13 above can be of great value.

There is yet another reason why the supply of teachers seeking employment in any given year is extremely difficult to project. Those who, in earlier years, had sought but not obtained jobs as teachers might or might not still be on the job market. We have virtually no idea of the number of graduates from previous years who are still seeking to become teachers. However, as the surplus of teachers being produced relative to the demand for them carries on from year to year, we can be sure that there are many such individuals who would prefer teaching to their current occupation.

CONCLUSIONS

Between 1970-71 and 1974-75 the overall number of public school teachers employed in Indiana did not decline. The actual surplus of teachers came about primarily as a result of the fact that decreasing enrollments in the elementary schools and stabilizing enrollments in secondary schools, combined with the great number of young teachers hired during the previous decade who were not close to retirement age, led to sharp declines in openings for new teachers.

The data reported in Table 5 of this report make this trend vividly apparent; of 1970-71 Indiana elementary and secondary public school teachers, 3,797 and 1,458 respectively had been college students the previous year. By 1972-73 these figures had dropped to 2,870 and 1,131 and by 1974-75, only 2,034 of the state's public school elementary level teachers and 1,006 of its secondary level teachers had been college students the previous year. Though the overall number of teachers in the state had hardly changed during this five-year period, the hiring of entry-level teachers from colleges and universities had declined by nearly forty percent. This decline in new-hires, caused by the end of rapid growth in the overall number of teachers employed, and by the fact that the average ages and years of experience of teachers were low due to great hiring in the 1960's, led to a considerable surplus of teachers being produced by the educational system.

In spite of the fact that the well-publicized teacher surplus of recent years has led to declines in the numbers of young people intending to pursue careers as teachers, Indiana's school superintendents report that, for almost all subject areas, there are still oversupplies of teachers seeking employment. Though there have been recent decreases in the education degrees

granted by Indiana's colleges and universities, and there has been a rapid decline in those seeking teacher certification, the surplus of teachers in the state continues to exist.

Indiana's school superintendents generally indicated that they did not anticipate planned changes in the staffing patterns in their schools. Historically, student/teacher ratios have declined when enrollments decline, but this is more a result of extenuating circumstances than the result of a definite plan to lower the ratio. Because of the uncertainty apparent in estimating future student/teacher ratios, projections of need for inexperienced teachers were developed using constant and declining ratios.

The projections indicate that an end to the rapid decline in need for inexperienced teachers at the elementary school level can be expected to begin in 1976-77. Because the career aspirations of young people have moved rapidly away from elementary school teaching, it is possible that this area may soon enter a relative supply/demand balance. It is even possible that some of the elementary education graduates of previous years who were not able to find jobs will be absorbed into the schools as elementary school teachers. Further lowering of the student/teacher ratio will significantly affect the need for inexperienced teachers at this level.

The greatest problem exists at the secondary level where, as enrollments begin a sharp decline, the demand for new teachers will be drastically reduced. The constant secondary school student/teacher ratio could lead to a demand for as few as 100-200 inexperienced teachers by 1981-82. Even the more probable declining student/teacher ratio will result in drastic reductions in the hiring of secondary school teachers. It is highly unlikely that a very high percentage of those currently entering Indiana's colleges and universities who

plan to become secondary school teachers in four or five years will, in fact, find teaching positions available at that time. The decline of available secondary level teaching positions will be more pronounced than the decline of young people aspiring to such positions, and the teacher surplus at the secondary level might well be intensified by the decade's end.

Though there will be a shortage of available teaching positions at the secondary level, this does not mean that there will be no jobs available. There are some teaching specialty areas, particularly in the industrial arts, vocational and agricultural areas, and some areas of mathematics and advanced science where the prospects of job applicants will be good. Combinations of two or more proficiency areas will also aid teaching aspirants in their quest for employment, particularly in smaller communities where teachers often teach a variety of subjects. These means will offer a solution to finding a job for some inexperienced teachers, but for the majority, the prospects at the secondary level appear to be bleak.

APPENDIX A

METHODOLOGY FOR PROJECTING FUTURE DEMAND FOR INEXPERIENCED TEACHERS

In developing projections of demand for inexperienced teachers, (i.e. those with zero years of teaching experience) it was first necessary to estimate the total teacher force that would be employed in future years. These projections were calculated based upon Department of Public Instruction school enrollment projections (Appendix B) and student/teacher ratios for the 1970-71 through 1975-76 school years. Two sets of projections were developed, one assuming the student/teacher ratio remaining constant from 1975-76 and the other assuming a decline of 0.3 students per teacher in years of overall enrollment decline, a rate of decline which appeared to closely represent what actually took place as enrollments at the elementary level declined in the early 1970's. By dividing the number of projected students by the student/teacher ratio, projections of overall teacher employment were developed.

Data concerning the number of years of experience of all Indiana public elementary and secondary teachers from 1970-71 to 1975-76 were obtained from the Department of Public Instruction. The projections are based upon the proportion of these teachers who increased their years of teaching experience by one with each passing year. In this way, average progression ratios were developed. Table A depicts the manner in which the average ratios were calculated.

TABLE A: CALCULATION OF AVERAGE PROGRESSION RATIOS FOR SECONDARY SCHOOL TEACHERS, 1970-71 TO 1975-76

Years of Teaching Experience	1 No. of Teachers 1970-71	Progr. Ratio (Column 2 / Column 1)	2 No. of Teachers 1971-72	Progr. Ratio (Column 3 / Column 2)	3 No. of Teachers 1972-73	Progr. Ratio (Column 4 / Column 3)	4 No. of Teachers 1973-74	Progr. Ratio (Column 5 / Column 4)	5 No. of Teachers 1974-75	Progr. Ratio (Column 6 / Column 5)	6 No. of Teachers 1975-76	7 Average Progr. Ratio (Columns 1 through 6)
0	1,494	.91	1,165	.98	1,107	1.02	1,145	.95	1,038	1.01	927	.97
1	1,484	.91	1,363	.93	1,136	.93	1,131	.93	1,089	1.03	1,053	.95
2	1,261		1,336		1,264		1,052		1,057		1,127	
3 to 8	-		-		-		-		-		-	-
9	566	1.00	586	.97	632	.97	655	.97	711	.97	716	.98
10	502		565		566		614		633		693	.98
Over 10 yrs.	5,491	.93	5,998	.92	6,095	.94	6,264	.93	6,449	.97	6,844	.94

Column 7 represents the average proportion of teachers advancing from one experience level to the next each year over the six year period. These average ratios were calculated for numbers of teachers advancing from zero to one year of teaching experience to those progressing from nine to ten years of teaching experience. Because the ratios are based upon total numbers of teachers and not upon individuals, there are some cases in which the ratio is higher than 1.00. This means that, at that level of experience, the number of teachers reentering the teaching force exceeded the number of those leaving it.

The number of those passing from ten years of experience to more than ten years was assumed to be the same as that passing from nine to ten years. (As higher levels of experience were encountered, changes in the ratios from year to year became less pronounced than for earlier experience levels.) Progression ratios for those with more than ten years of experience were calculated by subtracting from a given year the number who had progressed from ten years experience the previous year to more than ten, then dividing the result by the number with more than ten years experience the previous year.

Retention in the teacher force from the actual data of 1975-76 to projected data of 1976-77, using the average progression ratios, was calculated. The only missing element in the total number of 1976-77 teachers was the number of teachers with zero years of experience (the demand for inexperienced teachers.) Since the total number of teachers employed had been projected using student/teacher ratios, it was a simple matter to sum the number of those with one or more years of experience, and then to subtract this sum from the total teachers employed to fill in the cell representing 1976-77 inexperienced teachers. The same procedure was then repeated for 1977-78 and for subsequent years of the projections.

Tables B through E represent the complete projections of the public school teacher force to 1981-82 by years of teaching experience.

TABLE B: ELEMENTARY SCHOOL CLASSROOM TEACHERS (CONSTANT STUDENT/TEACHER RATIO)

Years of Teaching Experience	Actual						Projected					
	1970-71 Teachers	1971-72 Teachers	1972-73 Teachers	1973-74 Teachers	1974-75 Teachers	1975-76 Teachers	1976-77 Teachers	1977-78 Teachers	1978-79 Teachers	1979-80 Teachers	1980-81 Teachers	1981-82 Teachers
0	3,579	2,967	2,599	2,359	1,925	1,607	1,850	1,831	1,532	1,551	1,492	2,158
1	3,345	3,306	2,896	2,562	2,295	1,986	1,575	1,813	1,794	1,501	1,520	1,462
2	2,598	2,955	2,955	2,674	2,389	2,233	1,827	1,449	1,668	1,651	1,381	1,398
3	2,062	2,272	2,540	2,633	2,433	2,248	1,987	1,626	1,289	1,484	1,469	1,229
4	1,741	1,810	2,002	2,220	2,332	2,215	2,001	1,769	1,447	1,148	1,321	1,308
5	1,414	1,525	1,617	1,760	1,985	2,124	1,971	1,781	1,574	1,288	1,021	1,176
6	1,285	1,304	1,388	1,487	1,619	1,831	1,954	1,814	1,638	1,448	1,185	940
7	1,064	1,162	1,178	1,286	1,409	1,527	1,685	1,798	1,669	1,507	1,332	1,090
8	978	1,009	1,067	1,071	1,200	1,324	1,420	1,567	1,672	1,552	1,402	1,239
9	883	936	961	995	1,012	1,143	1,258	1,349	1,488	1,588	1,474	1,332
10	832	837	864	906	931	976	1,074	1,182	1,268	1,399	1,493	1,386
Over 10	11,820	11,498	11,158	11,044	11,034	11,181	11,203	11,317	11,523	11,793	12,165	12,595
Total Teachers	31,600	31,581	31,226	30,996	30,565	30,393	29,805	29,296	28,562	27,910	27,255	27,313
Student Enrollments	774,554	766,753	747,935	735,029	709,612	689,576	676,576	665,026	648,360	633,565	618,692	620,000
Stdt/Tchr. Ratio	24.5	24.3	24.0	23.7	23.2	22.7	22.7	22.7	22.7	22.7	22.7	22.7

TABLE C: ELEMENTARY SCHOOL CLASSROOM TEACHERS (DECLINING STUDENT/TEACHER RATIO)

Years of Teaching Experience	Actual						Projected					
	1970-71 Teachers	1971-72 Teachers	1972-73 Teachers	1973-74 Teachers	1974-75 Teachers	1975-76 Teachers	1976-77 Teachers	1977-78 Teachers	1978-79 Teachers	1979-80 Teachers	1980-81 Teachers	1981-82 Teachers
0	3,579	2,967	2,599	2,359	1,925	1,607	2,249	2,236	1,954	2,009	1,681	2,611
1	3,345	3,306	2,896	2,562	2,295	1,986	1,575	2,204	2,191	1,915	1,969	1,647
2	2,598	2,955	2,955	2,674	2,389	2,233	1,827	1,449	2,028	2,016	1,762	1,811
3	2,062	2,272	2,540	2,633	2,433	2,248	1,987	1,626	1,289	1,805	1,794	1,568
4	1,741	1,810	2,002	2,220	2,332	2,215	2,001	1,769	1,447	1,148	1,606	1,597
5	1,414	1,525	1,617	1,760	1,985	2,124	1,971	1,781	1,574	1,288	1,021	1,429
6	1,285	1,304	1,388	1,487	1,619	1,831	1,954	1,814	1,638	1,448	1,185	940
7	1,064	1,162	1,178	1,286	1,409	1,527	1,685	1,798	1,669	1,507	1,332	1,090
8	978	1,009	1,067	1,071	1,200	1,324	1,420	1,567	1,672	1,552	1,402	1,239
9	883	936	961	995	1,012	1,143	1,258	1,349	1,488	1,588	1,474	1,332
10	832	837	864	906	931	976	1,074	1,182	1,268	1,399	1,493	1,386
Over 10	11,820	11,498	11,158	11,044	11,034	11,181	11,203	11,317	11,523	11,793	12,165	12,595
Total Teachers	31,600	31,581	31,226	30,996	30,565	30,393	30,204	30,092	29,741	29,468	29,184	29,245
Student Enrollments	774,554	766,753	747,935	735,029	709,612	689,576	676,576	665,026	648,360	633,565	618,692	620,000
Stdt/Tchr. Ratio	24.5	24.3	24.0	23.7	23.2	22.7	22.4	22.1	22.8	21.5	21.2	21.2

TABLE D: SECONDARY SCHOOL TEACHERS (CONSTANT STUDENT/TEACHER RATIO)

Years of Teaching Experience	Actual						Projected					
	1970-71 Teachers	1971-72 Teachers	1972-73 Teachers	1973-74 Teachers	1974-75 Teachers	1975-76 Teachers	1976-77 Teachers	1977-78 Teachers	1978-79 Teachers	1979-80 Teachers	1980-81 Teachers	1981-82 Teachers
0	1,494	1,165	1,107	1,145	1,038	927	915	788	817	495	380	126
1	1,464	1,363	1,136	1,131	1,089	1,053	899	888	764	792	480	369
2	1,261	1,336	1,264	1,052	1,057	1,127	1,000	854	844	725	753	456
3	1,034	1,173	1,224	1,135	956	1,034	1,048	930	794	785	674	700
4	968	932	1,068	1,083	1,042	971	962	975	865	739	730	627
5	869	872	865	963	992	1,022	903	895	906	804	687	679
6	722	841	817	827	869	1,005	981	867	859	879	772	659
7	696	696	784	774	772	847	955	932	824	816	827	734
8	616	667	664	742	741	753	813	917	895	791	783	794
9	566	586	632	655	711	716	723	780	880	859	759	752
10	502	565	566	614	633	693	702	709	765	863	842	744
Over 10	5,941	5,998	6,095	6,264	6,449	6,844	7,112	7,373	7,626	7,919	8,290	8,618
Total Teachers	16,135	16,193	16,222	16,362	16,347	16,993	17,013	16,908	16,839	16,458	15,977	15,258
Student Enrollments	348,560	357,364	360,082	363,696	363,332	362,758	362,371	360,144	358,664	350,555	340,300	325,000
Stdt/Tchr. Ratio	21.6	22.1	22.2	22.2	22.2	21.3	21.3	21.3	21.3	21.3	21.3	21.3

TABLE E: SECONDARY SCHOOL TEACHERS (DECLINING STUDENT/TEACHER RATIO)

Years of Teaching Experience	Actual						Projected					
	1970-71 Teachers	1971-72 Teachers	1972-73 Teachers	1973-74 Teachers	1974-75 Teachers	1975-76 Teachers	1976-77 Teachers	1977-78 Teachers	1978-79 Teachers	1979-80 Teachers	1980-81 Teachers	1981-82 Teachers
0	1,494	1,165	1,107	1,145	1,038	927	1,158	1,043	1,089	771	660	392
1	1,464	1,363	1,136	1,131	1,089	1,053	899	1,123	1,012	1,056	745	640
2	1,261	1,336	1,264	1,052	1,057	1,127	1,000	854	1,067	961	1,005	710
3	1,034	1,173	1,224	1,135	956	1,034	1,048	930	794	992	894	935
4	968	932	1,068	1,083	1,042	971	962	975	865	739	923	831
5	869	872	865	963	992	1,022	903	895	906	804	687	858
6	722	841	817	827	869	1,005	981	867	859	870	772	659
7	696	696	784	774	772	847	955	932	824	816	827	734
8	616	667	664	742	741	753	813	917	895	791	783	794
9	566	586	632	655	711	716	723	780	880	859	759	752
10	502	565	566	614	633	693	702	709	765	863	842	744
Over 10	5,941	5,998	6,095	6,264	6,449	6,844	7,112	7,373	7,626	7,919	8,290	8,618
Total Teachers	16,135	16,193	16,222	16,362	16,347	16,993	17,256	17,398	17,582	17,441	17,187	16,667
Student Enrollments	348,560	357,364	360,082	363,696	363,332	362,758	362,371	360,144	358,664	350,555	340,300	325,000
Stdt/Tchr. Ratio	21.6	22.1	22.2	22.2	22.2	21.3	21.0	20.7	20.4	20.1	19.8	19.5

APPENDIX B: ENROLLMENT PROJECTIONS FOR INDIANA PUBLIC SCHOOLS

Year Born	# of Births	Sch Year	Nurs	Kdgn	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Un-Grd Sp.Ed.	Total K-12
1959	112,670	65-66	0	67,758	104,258	97,013	95,600	91,698	88,764	87,033	88,109	85,771	87,630	79,276	73,514	67,415	7,597	1,135,514
1960	112,711	66-67	0	75,500	105,273	98,246	96,027	95,244	91,292	88,744	89,619	87,107	91,122	83,604	73,134	68,086	10,175	1,166,339
1961	112,208	67-68	0	76,634	107,741	98,971	97,425	95,699	94,995	91,106	91,256	89,635	93,389	86,462	77,560	67,915	11,841	1,192,151
1962	108,700	68-69	308	80,463	106,047	100,910	97,390	96,336	94,980	94,273	93,638	90,468	95,284	88,085	81,025	72,222	11,863	1,216,089
1963	106,956	69-70	533	82,985	105,744	99,774	99,436	96,653	96,353	94,956	96,967	93,191	96,064	89,986	81,184	75,010	13,160	1,253,146
1964	105,962	70-71	609	80,676	102,987	96,709	95,814	96,603	94,915	94,684	96,929	95,913	98,409	91,148	84,049	74,954	14,810	1,231,285
1965	98,075	71-72	622	76,969	95,901	96,065	94,521	95,169	96,120	94,847	97,705	96,425	101,509	93,788	84,662	77,405	28,953	1,230,661
1966	95,658	72-73	934	76,494	88,226	88,976	93,444	92,990	93,655	95,546	97,881	97,217	100,905	95,863	86,298	77,016	35,009	1,220,454
1967	93,619	73-74	852	74,431	87,191	83,755	88,078	93,588	92,799	94,264	98,918	96,436	101,147	95,724	88,737	78,088	33,135	1,207,143
1968	91,511	74-75	888	76,223	83,655	81,090	81,387	86,658	91,893	92,090	96,125	96,714	99,654	95,679	87,633	79,466	37,665	1,188,820
1969	93,795	75-76	878	75,632	83,028	78,600	80,122	81,567	84,660	91,732	94,383	95,484	101,213	94,051	88,214	79,280	41,233	1,170,077
1970	99,[illegible]79	76-77	748	76,221	86,248	78,090	77,655	81,041	79,979	85,857	94,142	93,925	100,082	96,013	86,479	79,797	45,020	1,161,297
1971	95,49[illegible]	77-78	815	75,925	85,531	81,143	77,424	78,652	80,241	81,271	87,253	93,511	98,685	94,476	88,726	78,257	49,044	1,150,954
1972	87,14[illegible]	78-79	1,019	74,297	79,807	80,368	80,669	78,768	77,351	80,844	82,571	87,982	98,327	93,155	86,832	80,350	53,366	1,135,706
1973	83,88[illegible]	79-80	1,129	72,704	74,601	74,996	79,450	81,994	78,037	78,458	82,554	83,475	93,328	92,952	85,779	78,496	58,057	1,116,010
1974	83,00[illegible]	80-81	1,168	71,544	71,194	70,261	73,941	80,308	81,743	78,679	79,748	82,818	89,309	87,454	85,731	77,806	63,153	1,094,857

Source: Pro[illegible]ections of the Indiana Department of Public Instruction